

## **REMARKS**

### **1. Introduction**

In the Office Action mailed April 4, 2005, the Examiner rejected all pending claims under 35 U.S.C. § 103(a) as being unpatentable over various combinations of references. The Examiner rejected claims 2, 4, 6, 7, 10, and 11 over U.S. Patent No. 6,434,381 (Moore) in view of U.S. Patent No. 6,434,381 (Papadimitriou). The Examiner rejected claim 3 over Moore in view of Papadimitriou, and further in view of U.S. Pub. No. 2002/0107029 (Caughran). The Examiner rejected claim 5 over Moore in view of Papadimitriou, and further in view of U.S. Patent No. 6,233,448 (Aplerovich). The Examiner rejected claims 8 and 15 over Moore in view of Papadimitriou, and further in view of U.S. Pub. No. 2003/0060211 (Chern). The Examiner rejected claim 9 over U.S. Patent No. 6,650,902 (Richton) in view of Papadimitriou and in view of Chern. The Examiner rejected claims 12 over Richton in view of Papadimitriou. The Examiner rejected claims 13 and 14 over Richton in view of Papadimitriou in view of Caughran and in view of Chern.

Applicants have amended claims 4, 7-10, 12, and 13. Claims 2-15 are currently pending.

For the reasons set forth below, Applicants request reconsideration and allowance of the claims as amended.

### **2. Response to the Claim Rejections**

#### **a. Claims 2-8, 10, 11, and 15**

Of these claims, claim 4 is independent and the other claims are dependent therefrom. The Examiner has rejected claim 4 under § 103 as being unpatentable over Moore in view of Papadimitriou. In response, Applicants have amended claim 4 to recite "receiving a request for

location based information regarding a service, the request including a service identifier, wherein the service identifier is associated with the service.” Support for this amendment can be found at various places in the specification, for example: page 5, lines 12-14; page 10, lines 19-21; page 12, lines 17-21; and page 15, line 22 – page 16, line 2. Applicants submit that this amendment clearly distinguishes claim 4 from the Moore/Papadimitriou combination.

In particular, in rejecting claim 4, the Examiner acknowledged that Moore does not disclose associating a level of granularity with the service identifier and that Moore does not disclose based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity. Instead, the Examiner alleged that Papadimitriou discloses associating a level of granularity with a service identifier. In fact, Papadimitriou teaches estimating the location of a mobile phone with a precision that is dependent on a “priority level” (col. 4, lines 56-57).

However, the “priority level” in Papadimitriou is not a “service identifier” as recited in claim 4. Claim 4, as amended, specifies that the service identifier is associated with a service and that the service identifier is included in a request for location based information regarding the service. In contrast, the priority level in Papadimitriou is neither associated with a service nor included in a request for location based information regarding a service. Papadimitriou teaches that the priority level is obtained from the user when a user requests the location of the terminal device. The user is prompted to enter a desired priority level, and the user will then enter the priority level he wishes to use for estimating the location of the terminal device (col. 5, line 66 – col. 7, line 2). Thus, Papadimitriou teaches that when a user requests a location estimate, the user can specify the accuracy of the location estimate.

The method of claim 4 is a significant advance over the approach of Moore/Papadimitriou because the user need not specify the accuracy of the location estimate. Instead, the user can simply request location based information regarding a service, and the network can then determine, based on the service identifier, what level of granularity to use when determining the position of the mobile station. For example, as set forth the specification, the network may categorize a request for pizza delivery as medium granularity, e.g., within two miles in an urban setting (page 12, lines 17-18). Thus, the method of claim 4 makes use of the principle that different levels of granularity are appropriate for location based information regarding different types of services. The Moore/Papadimitriou combination in no way suggests this principle.

According, Applicants submit that claim 4, as amended, is allowable over Moore, Papadimitriou, and the other prior art of record. Applicants further submit that claims 2, 3, 5-8, 10, 11, and 15 are allowable for at least the reason that that the claims are dependent on an allowable claim.

**b. Claim 9**

The Examiner has rejected claim 9 under § 103 as being unpatentable over Richton in view of Papadimitriou and in view of Chern. In response, Applicants have amended claim 9 to recite “receiving a request for location based information regarding a service, the request including a service identifier, wherein the service identifier is associated with the service.” Applicants submit that this amendment clearly distinguishes claim 9 from the Richton/Papadimitriou/Chern combination.

In rejecting claim 9, the Examiner acknowledged that Richton does not disclose associating a level of granularity with the service identifier and that Richton does not disclose

based on the service identifier instructing the cellular wireless system to determine the position of the mobile station at the associated level of granularity. Instead, the Examiner alleged that Papadimitriou discloses associating a level of granularity with a service identifier. However, as noted above with respect to claim 4, Papadimitriou actually teaches estimating the location of a mobile phone with a precision that is dependent on a “priority level.” The “priority level” in Papadimitriou is not a “service identifier” as recited in claim 9 because it is not associated with a service and it is not included in a request for location based information regarding a service. Moreover, the Examiner has provided no rationale why one of ordinary skill in the art would have been motivated to modify the priority level in Papadimitriou so that it is associated with a service and included in a request for location based information regarding the service.

Accordingly, Applicants submit that claim 9 is allowable over Richton, Papadimitriou, Chern, and the other prior art of record.

**c. Claim 12**

The Examiner has rejected claim 12 under § 103 as being unpatentable over Richton in view of Papadimitriou. In response, Applicant has amended claim 12 to recite “receiving from the switch a request for location based information regarding a service, wherein the request includes a service identifier, and wherein the service identifier is associated with the service.” Applicants submit that this amendment clearly distinguishes claim 12 from the Richton/Papadimitriou combination.

In making this rejection, the Examiner acknowledged that Richton does not disclose associating a level of granularity with the service identifier and that Richton does not disclose based on the service identifier instructing the cellular wireless system to determine the position

of the mobile station at the associated level of granularity. Instead, the Examiner alleged that Papadimitriou discloses associating a level of granularity with a service identifier.

However, as noted above with respect to claim 4, Papadimitriou actually teaches estimating the location of a mobile phone with a precision that is dependent on a “priority level.” The “priority level” in Papadimitriou is not a “service identifier” as recited in claim 12 because it is not associated with a service and it is not included in a request for location based information regarding a service. Moreover, the Examiner has provided no rationale why one of ordinary skill in the art would have been motivated to modify the priority level in Papadimitriou so that it is associated with a service and included in a request for location based information regarding the service.

Accordingly, Applicants submit that claim 12 is allowable over Richton, Papadimitriou, and the other prior art of record.

**d. Claim 13**

The Examiner has rejected claim 13 under § 103 as being unpatentable over Richton in view of Papadimitriou in view of Caughran and in view of Chern. In response, Applicants have amended claim 13 to recite “receiving a request for location based information regarding a service, the request including a service identifier, wherein the service identifier is associated with the service.” Applicants submit that this amendment clearly distinguishes claim 13 from the Richton/Papadimitriou/Caughran/Chern combination.

In making this rejection, the Examiner acknowledged that Richton does not disclose associating a level of granularity with the service identifier and that Richton does not disclose based on the service identifier instructing the cellular wireless system to determine the position

of the mobile station at the associated level of granularity. Instead, the Examiner alleged that Papadimitriou discloses associating a level of granularity with a service identifier.

However, as noted above with respect to claim 4, Papadimitriou actually teaches estimating the location of a mobile phone with a precision that is dependent on a "priority level." The "priority level" in Papadimitriou is not a "service identifier" as recited in claim 13 because it is not associated with a service and it is not included in a request for location based information regarding a service. Moreover, the Examiner has provided no rationale why one of ordinary skill in the art would have been motivated to modify the priority level in Papadimitriou so that it is associated with a service and included in a request for location based information regarding the service.

Accordingly, Applicants submit that claim 13 is allowable over Richton, Papadimitriou, and the other prior art of record.

### 3. Conclusion

Applicants submit that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at any time at (312) 913-0001.

Respectfully submitted,  
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